
Training Manual

Combination Microwave/Convection Ovens



ACE5140 P1333203M
DS1400E P1333204M
UCA1400 P1333205M

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Warranty

1 year - Parts, Labor, Travel
3 years - Magnetron (Part Only)

COMMERCIAL MICROWAVE TECHNICAL INFORMATION

ACE5140 / DS1400E / UCA1400



CAUTION

All safety information must be followed as provided in Service Manual.



WARNING

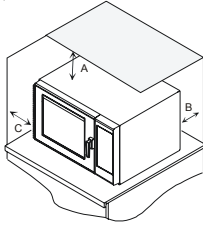
To avoid the risk of electrical shock, personal injury or death; disconnect power to oven and discharge capacitor before servicing, unless testing requires power.

Models	ACE5410 DS1400E	UCA1400
Power Source		
Voltage AC	230 VAC	230 VAC
Amperage (Single Unit)	16 A	16 A
Frequency	50 Hz	50 Hz
Single Phase, 3 wire grounded	X	X
Plug	CEE 7/7 Schuko	BS1363A
Power Output – Microwave		
Nominal microwave energy (IEC705)	1400 Watts	1400 Watts
Minimum temperature rise (ΔT)	10°F / 5°C	10°F / 5°C
Operating Frequency	2450 MHz	2450 MHz
Power Consumption		
Microwave only	1400 Watts	1400 Watts
Convection only	2700 Watts	2700 Watts
Combination	3400 Watts	3400 Watts
Dimensions		
Cabinet (in / cm)		
Width	49 cm (19 1/4")	49 cm (19 1/4")
Height	46 cm (18 1/4")	46 cm (18 1/4")
Depth	67 cm (26 1/4")	67 cm (26 1/4")
Oven Interior (in / cm)		
Width	33 cm (13")	33 cm (13")
Height	27 cm (10 1/2")	27 cm (10 1/2")
Depth	38 cm (15")	38 cm (15")
Weight		
Crated	46 kg. (102 lbs.)	46 kg. (102 lbs.)
Uncrated	43 kg. (95 lbs.)	43 kg. (95 lbs.)

Quick Start Reference Guide

Refer to Product Safety Manual for Safety Statements

Complete Owner's Manual available online



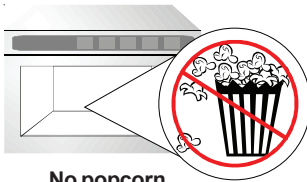
Oven Wall Clearances

A—For North American (UL/CSA) models, allow at least 2" (5.1 cm) of clearance around top of oven. For International (50 Hz) models, allow at least 7" (17.8 cm) of clearance around top of oven. Proper air flow around oven cools electrical components. With restricted air flow, oven may not operate properly and life of electrical parts is reduced.

B—Allow at least 2 9/16" (6,5 cm) between air discharge on back of oven and back wall.

C—Allow at least 1 1/4" (3 cm) of clearance around sides of oven.

The switching operation of this microwave oven can cause voltage fluctuations on the supply line. The operation of this oven under unfavorable voltage supply conditions can have adverse effects. This device is intended for the connection to a power supply system with a maximum permissible system impedance Z_{max} of **1.1 Ohm** at the interface point of the user's supply. The user has to ensure that this device is connected only to a power supply system which fulfills the requirement above. If necessary, the user can ask the public power supply company for the system impedance at the interface point.



No popcorn

Programming Preheat Setting

The factory default preheat setting is 450°F (230°C). **To program the preheat setting oven must be ON:**

1. Press Program Save pad.
2. Press Temp Entry pad.
3. Enter desired temperature by using the numeric key pads.
4. Preheat temperature is changed.

4

Preprogrammed Pads

To cook food using preprogrammed cooking sequences.

1. Open oven door and place food in oven. Close door.
2. Press desired pad.
3. Oven begins to cook.
4. At end of cooking cycle oven beeps and shuts off.

So...how do I use it?

Manual Operation

To cook food using a specific entered time and power level.

1. Press Preheat On/Off pad to start the oven.
 - **Oven Preheating 450°F (230°C)** displays with **Oven Preheating** flashing. (example of 450°F (230°C) shown)
2. Oven reaches preheat temperature.
 - Signal sounds and **Ready 450°F(230°C)** displays. (example of 450°F (230°C) shown)
3. Press Time Entry pad.
 - Enter desired cooking time by using numeric keypad.
4. Press Temp Entry pad if cooking temperature differs from preheat temperature.
 - Enter the new temperature.
5. Press Power Level pad.
 - Press numeric key pad for desired level. Press numeric key pad again to set power level to 100%.
 - For a lower microwave power, press pads 1 (for 10%) through 9 (for 90%).
 - **0 turns off the microwave power and cooking is by convection only.**
6. If stage cooking is desired, press STAGE pad and repeat steps 3, 4, and 5.
 - Up to 4 different stages can be programmed.
7. Press the Start pad to begin the cooking cycle.

Programming Items

1. Oven must be ON.
 - Press Preheat On/Off.
 - **Oven Preheating 450°F (230°C)** displays with **Oven Preheating** flashing. (example of 450°F (230°C) shown)
2. Oven reaches preheat temperature.
 - Signal sounds and **Ready 450°F (230°C)** displays with **Ready** flashing. (example of 450°F (230°C) shown)
3. Press Program Save pad.
4. Press pad to be programmed or reprogrammed.
5. Press Time Entry pad to program amount of cooking time.
 - The total microwave cooking time (all stages combined) is 20 minutes.
6. Press Temp Entry pad to program the cooking temperature.
 - Enter desired temperature by using numeric pads.
7. Press Power Level pad to program level of microwave power.
 - Press numeric key pad for desired level. Press numeric key pad again to set power level to 100%.
 - For a lower microwave power, press pads 1 (for 10%) through 9 (for 90%).
 - **0 turns off the microwave power and cooking is by convection only.**
8. Press Stage pad.
 - Enter cook time, temp and power level as in steps 4, 5 and 6.
 - To enter another cooking stage for that pad, press Stage pad again. Up to four different stages can be programmed.
9. Press the Program Save pad to save the program and changes.

NOTE: To discard changes, press Stop/Reset pad before pressing Program Save pad.

Quick Start Reference Guide

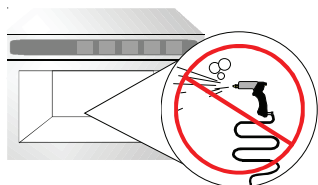
Refer to Product Safety Manual for Safety Statements

Complete Owner's Manual available online



Cleaning Teflon Coated Oven Cavity (some models)

- Wear protective rubber gloves when cleaning oven.
- Use only a plastic utensil or nylon scouring pad to aid in removing soil or build-up from the oven interior.
- **Do not use knife, metal utensil, or steel wool pad** to remove baked on material. This will damage the teflon coating.
- Refer to warranty for limitations regarding teflon interior and cleaning requirements.



DO NOT power spray



Can I change an option?

Options such as single or double pad programming, beep volume, and maximum cooking time can be changed to suit individual preferences.

To change options oven STANDBY must display:

1. Press hidden pad.
 - Pad is unmarked and located to the direct left of Preheat On/Off pad.
 - Nothing will be displayed when hidden pad is pressed.
2. Press Program Save pad.
 - The first user option will display. Oven is now in options mode.
3. Press number pad that controls option to be changed.
 - See table below for options.
 - Current option will display.
4. Press numeric pad again to change the option.
 - Each time pad is pressed, option will change.
 - Match code displayed with code for desired option.
5. Press Program Save pad to save changes.
 - To change additional options, repeat steps 3 and 4.
 - Changes take affect after Program Save pad is pressed.
 - Press Stop/Reset to return to STANDBY, or open and close oven door.

Numbered Pads	Display	Options (Factory Settings in Bold)
1 Double Digit Entry	Disabled Enabled	Allows 10 (0-9) preprogrammed pads. Allows 100 (00-99) preprogrammed pads.
2 Manual Time Entry	Disabled Enabled	Manual time entry/cooking not allowed Manual time entry/cooking allowed
3 Reset on Door Open	Disabled Enabled	Opening oven door does not reset oven back to ready mode Opening oven door resets the oven back to ready mode
4 Keybeep	Disabled Enabled	Keys do not beep when pressed (keybeep off) Keys beep when pressed (keybeep on)
5 Keybeep Volume	OFF LOW MEDIUM HIGH	Keybeep volume OFF Keybeep volume LOW Keybeep volume MEDIUM Keybeep volume HIGH
6 End of Cook Signal	Solid Beep 3 Second Beep 4 Beeps Once 4 Beeps Repeating	Food done signal is a continuous beep until reset by user Food done signal is a three second beep Food done signal is four beeps, continuously. Food done signal is four beeps, four times
7 Keypad Active	15 SECONDS 30 SECONDS 60 SECONDS 120 SECONDS ALWAYS	Keypad time entry window is 15 seconds Keypad time entry window is 30 seconds Keypad time entry window is one minute Keypad time entry window is two minutes Keypad time entry window is always active
8 Preheat Warnings	Disabled Program Temp Cavity Temp Both	Both temperature warnings off Warning only when preheat temperature does not match preprogrammed temperature Warning only when actual oven cavity temperature is not to preheat temperature Both temperature warnings on
TEMP PAD Temperature Scale	Degrees F Degrees C	Temperatures are displayed in °F for 60 Hz models Temperatures are displayed in °C for 50 Hz models
CLEAN FILTER Message Frequency	Disabled Weekly Monthly Quarterly	Oven will not display Clean Filter Oven will display Clean Filter every seven (7) days Oven will display Clean Filter every thirty (30) days Oven will display Clean Filter every ninety (90) days

For full product documentation visit:

www.amanacommercial.com

DISASSEMBLY PROCEDURES



WARNING

To avoid risk of electrical shock, personal injury or death; disconnect power to oven and discharge capacitors before following any disassembly procedures.

Component Location

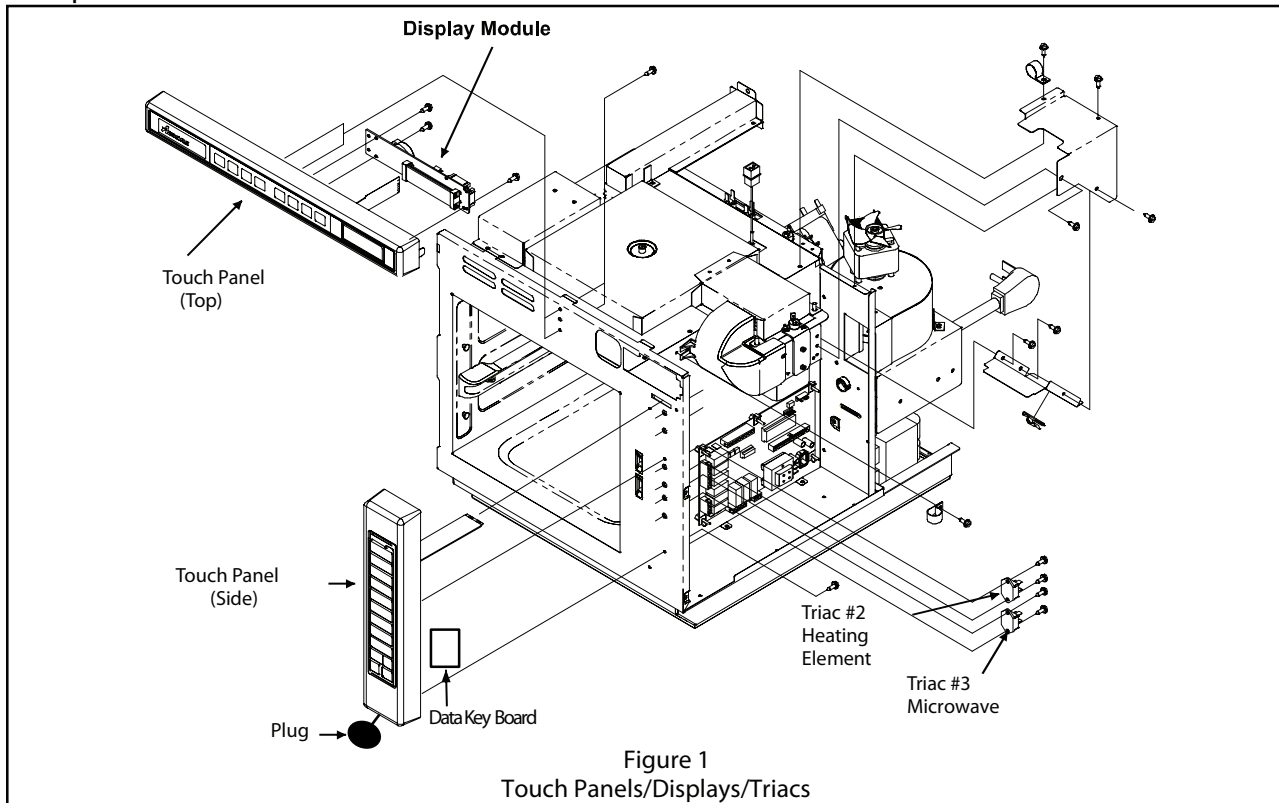


Figure 1
Touch Panels/Displays/Triacs

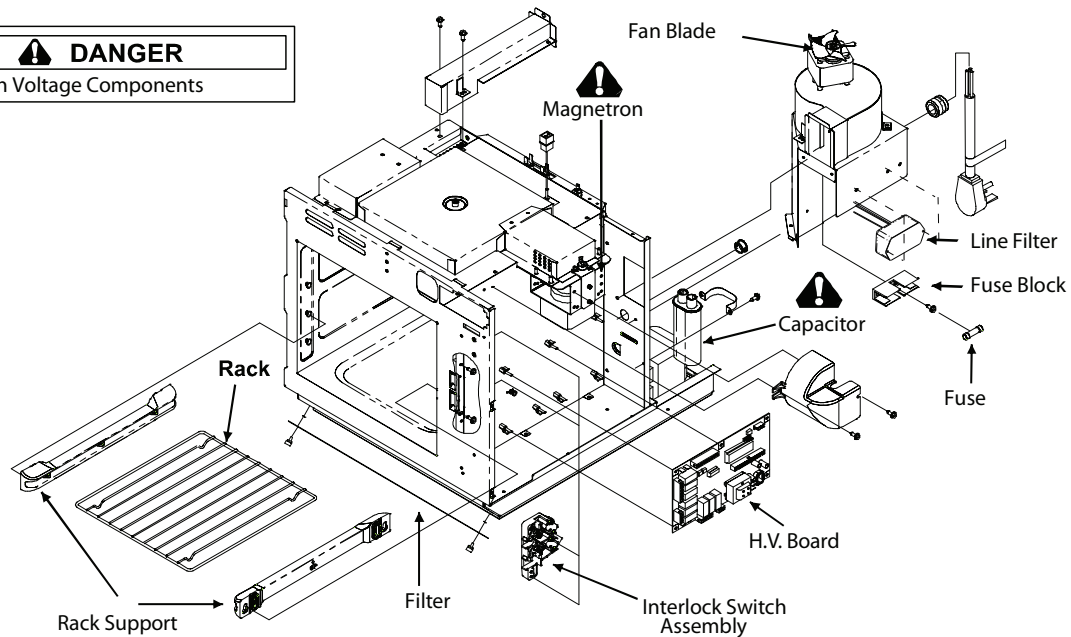


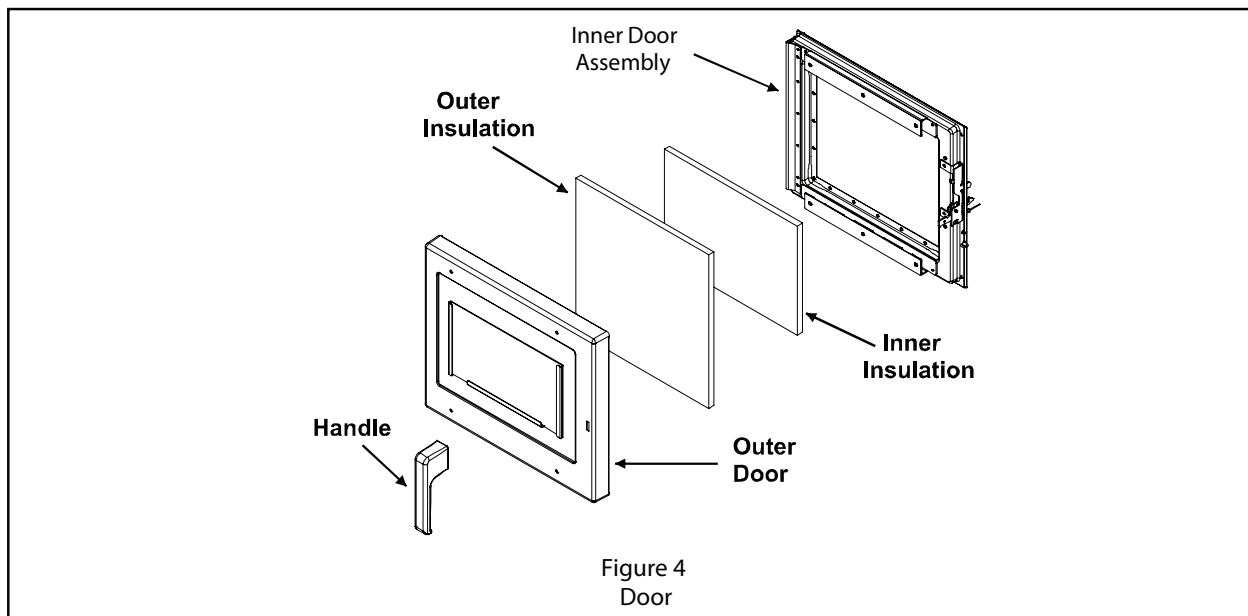
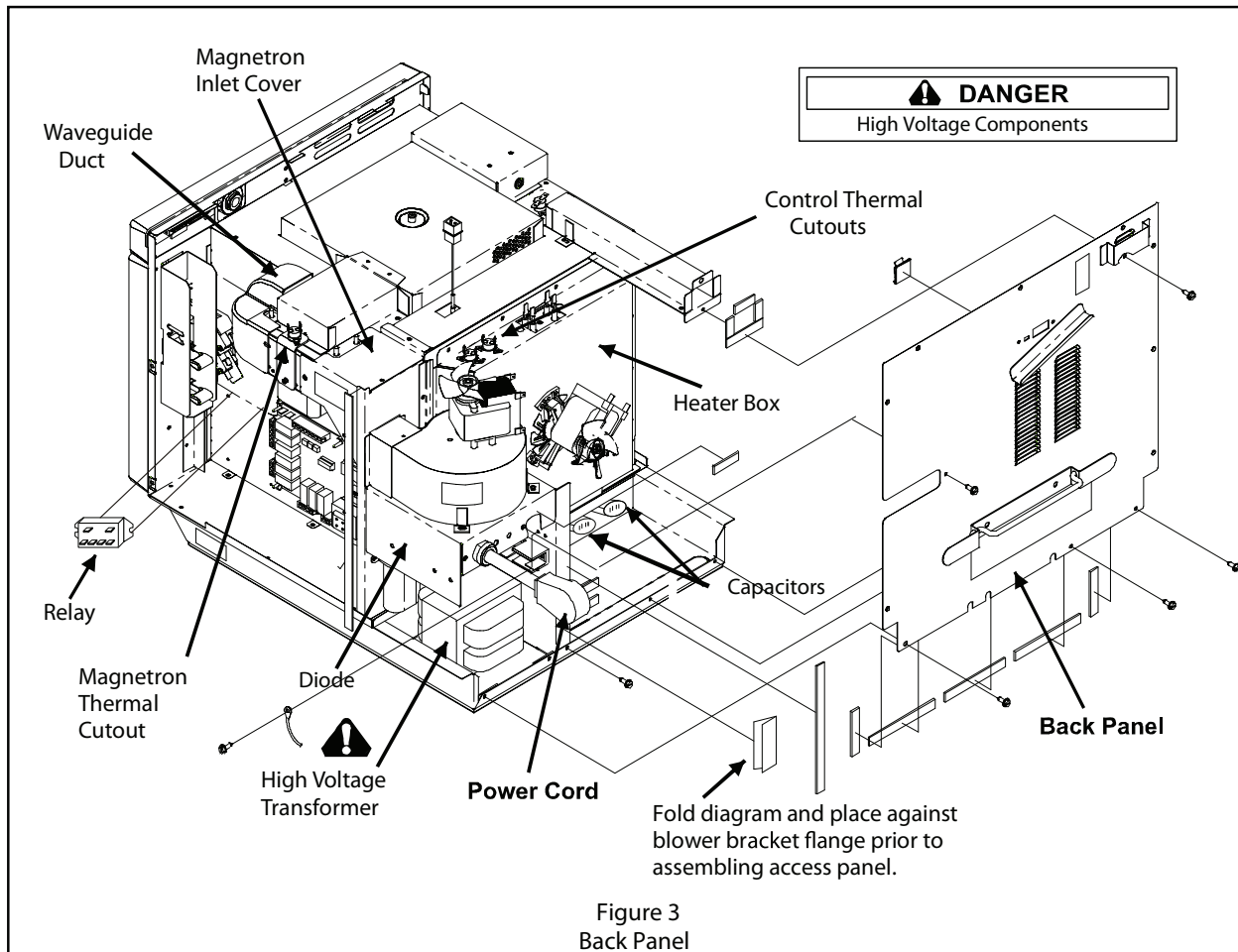
Figure 2
H.V. Board/I.S. Assembly

DISASSEMBLY PROCEDURES



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DISASSEMBLY PROCEDURES



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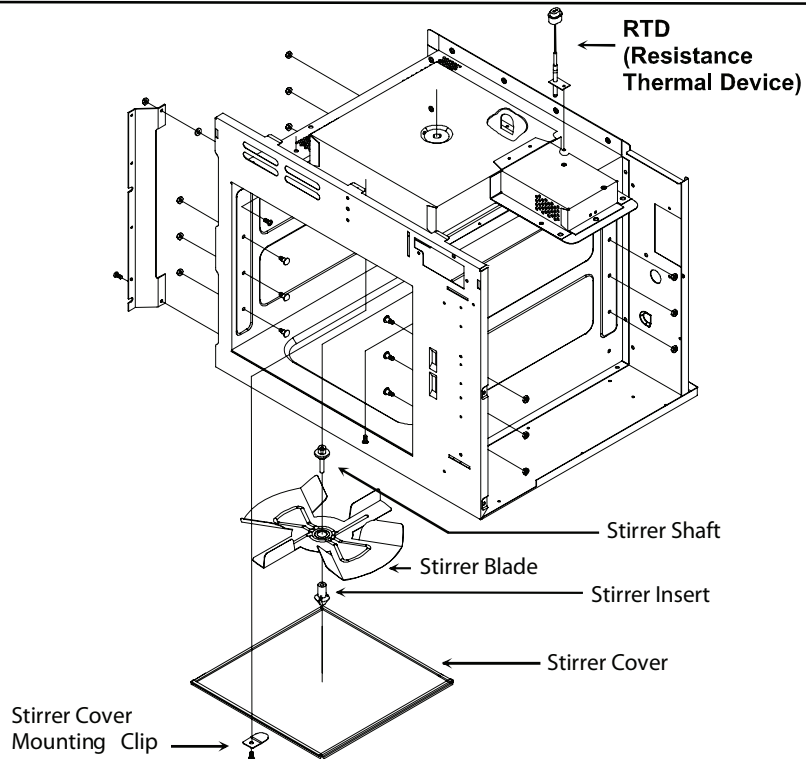


Figure 5
Stirrer Assembly

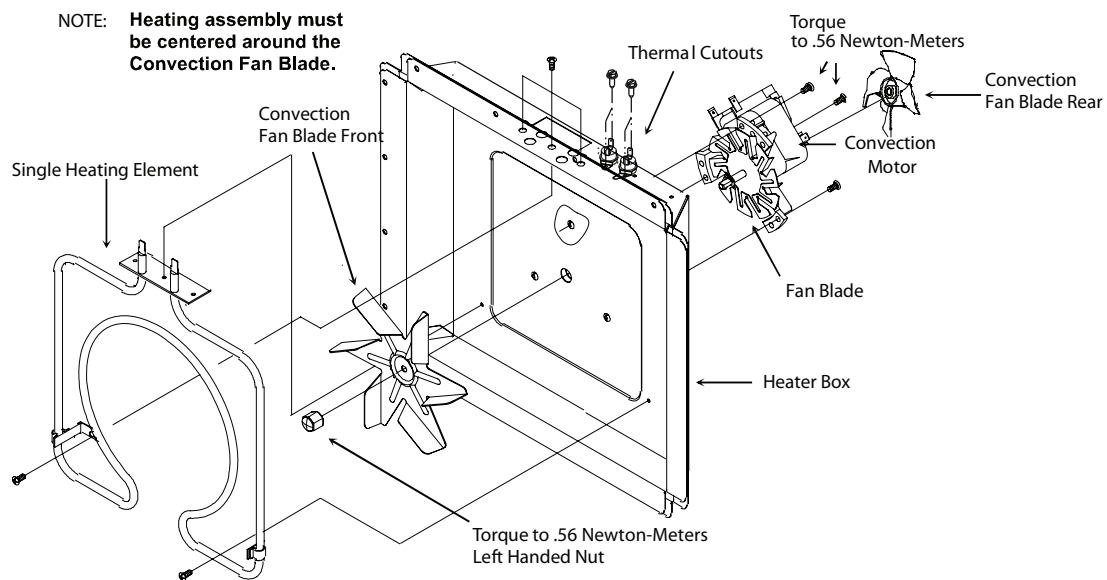


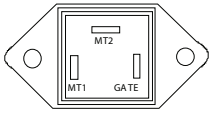
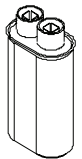
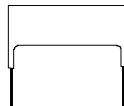
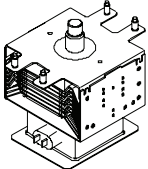
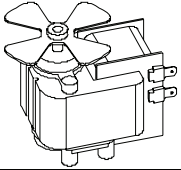
Figure 6
Heater Assembly

COMPONENT TESTING PROCEDURES



WARNING

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Illustration	Component	Test	Results
	Thermal cutout 31866P01 B5684123 B5684121	Disconnect all wires from TCO. Measure resistance across terminals. Oven TCO Fan TCO Magnetron TCO	Open at 300 °F (149 °C) and closed at 257°F (125 °C) Open at 350 °F (177 °C) and closed at 17 °F (-8 °C) Open at 280 °F (137 °C) and closed at 180°F (82 °C)
	Diode	Discharge Capacitor Remove diode lead from capacitor and connect ohmmeter. Reverse leads for second test.	Infinite resistance should be measured in one direction and 50KΩ or more in the opposite direction. NOTE: Ohmmeter must contain a battery of 6 volts minimum.
	Triac	Disconnect wires to triac. Measure resistance from: MT1 to MT2 MT1 to Gate..... MT2 to Gate..... All terminals to ground.....	Caution - Do not operate oven with wire to terminal MT2 removed. Infinite Approximately 60 Ω Infinite Infinite
Triac 1 (top) is for motors Triac 2 (middle) is for heater element Triac 3 (bottom) is for microwave		Voltage check measure voltage from: MT1 to Gate.....	0.8 VAC when energized. If no voltage, check H.V. board and wiring.
	Capacitors – 0.65 µf	Discharge Capacitor Remove wires from capacitor terminals and connect ohmmeter, set on highest resistance scale to terminals. Also check between each terminal and capacitor case.	Between Terminals: Meter should momentarily deflect towards zero then return to over 5 M Ω. If no deflection occurs, or if continuous deflection occurs, replace capacitor. Terminal to Case: Infinite resistance
	Snubber assembly	Disconnect wires to snubber. Measure resistance across terminals	Infinite
	Magnetron	Discharge Capacitor Remove wires from magnetron and connect ohmmeter to terminals. Also check between each terminal and ground.	Between Terminals: Less than 1 Ω Each terminal to ground measures Infinite resistance. Note: This test is not conclusive. If oven does not heat and all other components test good replace the magnetron and retest.
	Microwave blower motor	Remove all wires from motor. Measure resistance across coil.	Approximately 30 Ω
	Power relay	Coil voltage – unit running Terminal 0 to 1..... Coil resistance Terminal 0 to 1.....	(line voltage) 21 K Ω

COMPONENT TESTING PROCEDURES



WARNING

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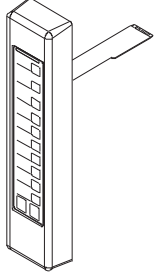
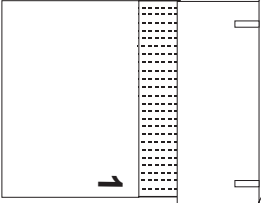
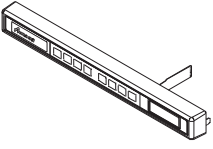
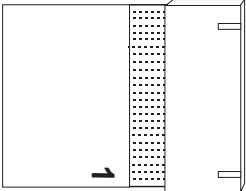
Illustration	Component	Test	Results
	Transformer	Discharge Capacitor Remove all wires from terminals. Measure resistance from: 230 to COM 230 to Ground..... Terminal 5 to 6..... Terminal 4 to Ground.....	Less than 1 Ω Infinite Less than 1 Ω Approximately 60 - 70 Ω
	Interlock switch	Disconnect wires to switch. With door open measure resistance from: Terminal 2 to 3..... Terminal 4 to 5..... Terminal 7 to 8..... With door closed measure resistance from: Terminal 2 to 3..... Terminal 4 to 5..... Terminal 7 to 8.....	Infinite Infinite Indicates continuity Indicates continuity Indicates continuity Infinite
	Convection blower motor	Remove wires from motor. Measure resistance across terminals A and B	Approximately 20 Ω
	Heating element assembly	Disconnect wires from terminals. Measure resistance across heating element. Element 2700 W	Approximately 15 Ω
	Resistance thermal device (RTD)	Temperature 0°C (32 °F) 24°C (75 °F) 177°C (350 °F)	Resistance 1000 Ω 1091 Ω 1654 Ω
	Line filter	Disconnect wire from terminals. Measure resistance of the following terminals: Blue to Blue Brown to Brown	< 1 Ω < 1 Ω

COMPONENT TESTING PROCEDURES



WARNING

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Illustration	Component	Test	Results		
	Side touch panel	Continuity is indicated as 100 Ω and below. 	Pad	Trace	Measurement
			1 2 3 4 5 6 7 8 9 0 Start Stop/Reset	3 & 5 3 & 6 3 & 7 3 & 8 3 & 9 4 & 5 4 & 6 4 & 7 4 & 8 4 & 9 5 & 6 6 & 9	Continuity Continuity Continuity Continuity Continuity Continuity Continuity Continuity Continuity Continuity Continuity Continuity
	Top touch panel	Continuity is indicated as 100 Ω and below. 	Pad	Trace	Measurement
			Preheat Time Entry Temp Entry Power Level Stage Program Save Hidden Pad	3 & 4 5 & 7 7 & 8 5 & 8 5 & 9 6 & 7 8 & 9	Continuity Continuity Continuity Continuity Continuity Continuity Continuity
Wire harness	High voltage board to display module harness	Test continuity of wires.	Indicates continuity		

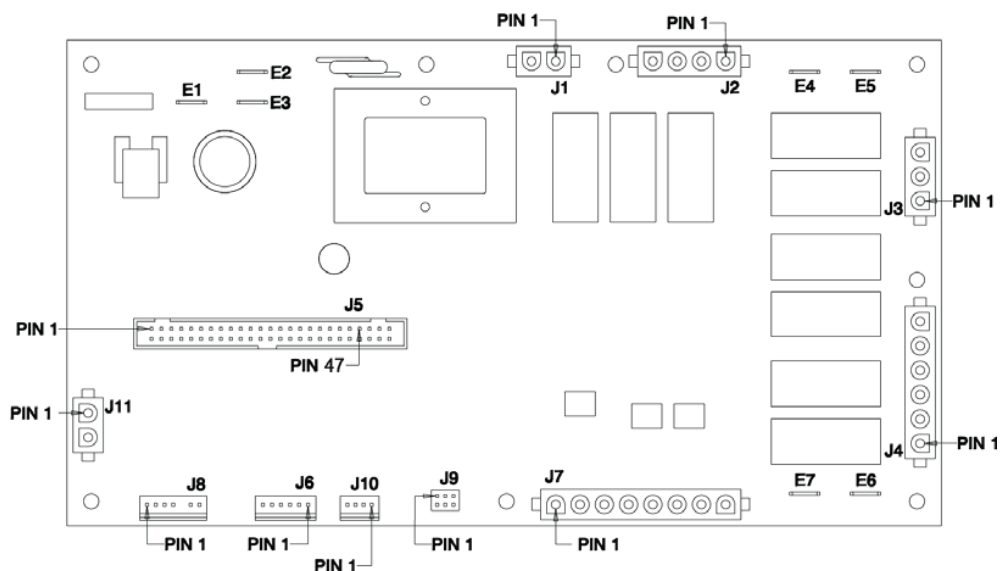
COMPONENT TESTING PROCEDURES



WARNING

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H.V. board



In straight convection mode, both elements operate simultaneously.

In combination mode, the rear element will operate simultaneously with either the microwave or front element.

Function	Test Set-Up	Meter Setting	Probe Placement	Results
Input to H.V. board	At H.V. board	Volts	J1 pin 1 (Black wire) & J1 pin 2 (Red wire)	Line voltage
Output to display board	Disconnect J5 connector	Volts	J5 pin 1 & J5 pin 47	7.4 VDC

Function	Test Set-Up	Meter Setting	Probe Placement	Results
Cooling fan	Disconnect J2 connector	Ohms	J1 pin 1 (Black wire) & J2 pin 4	Test mode 5 off – no continuity Test mode 5 on – $< 1 \Omega$
Convection motor	Disconnect J2 connector	Ohms	J1 pin 1 (Black wire) & J2 pin 3	Test mode 4 off – no continuity Test mode 4 on – $< 1 \Omega$
Microwave	Disconnect J4 connector	Ohms	J4 pin 4 & J4 pin 5	Test mode 3 off – no continuity Test mode 3 on – $< 1 \Omega$
Heater	Disconnect J4 connector	Ohms	E6 & J4 pin 1	Test mode 1 off – no continuity Test mode 1 on – $< 1 \Omega$

POWER TEST



WARNING

To avoid risk of electrical shock, personal injury or death; disconnect power to oven and discharge capacitor before servicing, unless testing requires power.

Power Test

All Amana and Menumaster microwave oven power outputs are rated using the IEC705 standards. Using the IEC705 test method requires precision measurements and equipment that is not practical to be performed in the field. Using the test shown below will indicate if the oven performance is satisfactory.

Test equipment required:

- 1000 ml test container (Part # 12018801) and thermometer.
- Digital watch / watch with a second hand for use on ovens with electromechanical timers.

Important Notes:

- Low line voltage will cause low temperature rise / power output.
- Ovens must be on a dedicated circuit, properly grounded, and polarized. Other equipment on the same circuit may cause a low temperature rise / power output.
- This test and results are not a true IEC705 test procedure and are only intended to provide service technicians with an easy means of determining if the microwave oven cooking output is correct.

Procedure

1. Fill the test container to the 1000 ml line with cool tap water.

NOTE: Water temperature should be approximately 60° F / 16° C.

2. Using the thermometer, stir water for five to ten seconds; measure, and record the temperature (T1).
3. Place test container of water in the center of oven cavity and close door.
4. Heat the water for a 33-second full power cycle.

NOTE: Use a digital watch or a watch with a second hand for ovens with electromechanical timers.

5. At end of the cycle, remove test container. Using the thermometer, stir water for five to ten seconds and record the ending temperature (T2).
6. Subtract the starting water temperature (T1), from the ending water temperature (T2) to obtain the temperature rise (ΔT).
7. If the temperature rise (ΔT) meets or exceeds the minimum, the test is complete. If the temperature rise fails to meet the minimum temperature rise, test the line voltage to verify it is correct. Then repeat step 1 making sure to change the water. If the temperature rise (ΔT) fails to meet the minimum temperature rise, the oven will require service.

Minimum Temperature Rise at Thirty -Three (33) Seconds Run Time

ΔT (°F)	Cooking Power Output	ΔT (°C)	Cooking Power Output
14° F	1400	7.5°C	1400

SERVICE MODE

Accessing Service Mode

Mode Name	Service Mode																																								
Entry	Pressing Hidden Pad, 1, 3, 5, 7, 9 while in Preheat is OFF																																								
Functional Description	Main Service Mode Menu																																								
Display																																									
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				S	e	r	v	i	c	e		M	o	d	e																										
				5	0		H	Z			2	3	0		V																										

Pad 1

Mode Name	Service Pad 1																																								
Entry	Pressing Pad 1 while in Service Mode																																								
Functional Description	Calrod #1 and convection fan shall be toggled. When on, it shall run for 62 seconds.																																								
Display																																									
<table><tr><td></td><td></td><td></td><td></td><td></td><td>C</td><td>a</td><td>l</td><td>r</td><td>o</td><td>d</td><td>:</td><td></td><td></td><td></td><td></td><td>O</td><td>N</td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>A</td><td>m</td><td>p</td><td>s</td><td>:</td><td></td><td>1</td><td>2</td><td></td><td></td></tr></table>							C	a	l	r	o	d	:					O	N													A	m	p	s	:		1	2		
					C	a	l	r	o	d	:					O	N																								
										A	m	p	s	:		1	2																								

Pad 3

Mode Name	Service Pad 3																		
Entry	Pressing Pad 3 while in Service Mode																		
Functional Description	Magnetron #1 shall be toggled. When on, it shall run for 62 seconds.																		
Display																			
		M	a	g	n	e	t	r	o	n		#	1	:		O	N		
		0	0	:	4	5				A	m	p	s	:		1	2		

SERVICE MODE

Pad 4

Mode Name	Service Pad 4																			
Entry	Pressing Pad 4 while in Service Mode																			
Functional Description	Convection Fan shall be toggled.																			
Display																				
					C	o	n	v	.		F	a	n	:		O	N			
										A	m	p	s	:		0	3			

Pad 5

Mode Name	Service Pad 5																		
Entry	Pressing Pad 5 while in Service Mode																		
Functional Description	Auxiliary Output shall be toggled.																		
Display																			
			A	u	x	.		O	u	t	p	u	t	:		O	N		

Pad 7

Mode Name	Service Pad 7																		
Entry	Pressing Pad 7 while in Service Mode																		
Functional Description	Displays Tube Hours stored in EEPROM																		
Display																			
		M	a	g	n	e	t	r	o	n		H	o	u	r	S			
						0	0	1	7	4	3								

SERVICE MODE

Pad 8

Mode Name	Service Pad 8																																								
Entry	Pressing Pad 8 while in Service Mode																																								
Functional Description	Displays Door Cycles stored in EEPROM. Will always be a multiple of ten.																																								
Display																																									
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					D	o	o	r		C	y	c	l	e	s																										
							0	0	2	4	5	3	8	0																											

Pad 9

Mode Name	Service Pad 9																																								
Entry	Pressing Pad 9 while in Service Mode																																								
Functional Description	Prompts user to clear service information.																																								
Display																																									
<table><tr><td></td><td></td><td>P</td><td>r</td><td>e</td><td>s</td><td>s</td><td></td><td>S</td><td>T</td><td>A</td><td>R</td><td>T</td><td></td><td>t</td><td>o</td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td>C</td><td>l</td><td>e</td><td>a</td><td>r</td><td></td><td>s</td><td>e</td><td>r</td><td>v</td><td>.</td><td></td><td>i</td><td>n</td><td>f</td><td>o</td><td></td><td></td></tr></table>				P	r	e	s	s		S	T	A	R	T		t	o							C	l	e	a	r		s	e	r	v	.		i	n	f	o		
		P	r	e	s	s		S	T	A	R	T		t	o																										
		C	l	e	a	r		s	e	r	v	.		i	n	f	o																								

Pad 0

Mode Name	Service Pad 0																																								
Entry	Pressing Pad 0 while in Service Mode																																								
Functional Description	Displays offset used when heating cavity.																																								
Display																																									
<table><tr><td></td><td></td><td></td><td></td><td>T</td><td>e</td><td>m</td><td>p</td><td>.</td><td></td><td>O</td><td>f</td><td>f</td><td>s</td><td>e</td><td>T</td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>2</td><td>0</td><td>°</td><td>C</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr></table>						T	e	m	p	.		O	f	f	s	e	T													2	0	°	C								
				T	e	m	p	.		O	f	f	s	e	T																										
								2	0	°	C																														

TEMP Pad

Mode Name	Display Temperature																
Entry	Pressing the Temp Pad in Service Mode.																
Functional Description	Displays temperature as reported by RTD																
Display																	
				C	a	v	i	t	y		T	e	m	P			
							1	9	4	°	C						

TEST MODES



WARNING

To avoid risk of electrical shock, personal injury or death; disconnect power to oven and discharge capacitors before following any disassembly procedures.

Convection Temperature Test

NOTE: It is absolutely necessary to own and use a thermocouple type oven tester to accurately measure oven temperature. No other type of thermometer can take its place.

NOTE: Before testing an oven to check calibration, inspect the RTD for proper mounting.

1. Place one wire rack in center position. Remove any other racks and utensils.
2. Clip thermocouple to the center rack and run lead outside oven door, or wrap thermocouple around rack and have the tip of thermocouple extend upward towards top of cavity approximately 1".
3. Press **PREHEAT ON/OFF** pad.
4. Press **PROGRAM SAVE** pad.
5. Press **TEMP** pad.
6. Enter 230°C.
7. Allow oven to cycle one time.
8. Record high and low peaks from next two cycles.

NOTE: Display does not indicate if heating elements are on or off.

Fahrenheit Example:

		<u>LOW</u>		<u>HIGH</u>	
Cycle	1	440°F		460°F	
Cycle	2	<u>439°F</u>		<u>461°F</u>	
		879°F	+	921°F	= 1800°F
		1800°F / 4 = 450°F average temperature			

Celsius Example:

		<u>LOW</u>		<u>HIGH</u>	
Cycle	1	230°C		240°C	
Cycle	2	<u>230°C</u>		<u>240°C</u>	
		460°C	+	480°C	= 940°C
		940°C / 4 = 235°C average temperature			

If the average temperature is too high or too low the oven temperature offset needs to be calibrated.

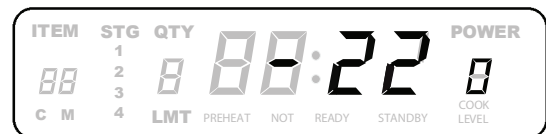
Convection Temperature Calibration

NOTE: It is normal for the average oven temperature to vary from the oven setting by as much as 25°C. Difference will not effect cooking since recipes are written with this difference in mind.

Calibration

NOTE: Door must be closed and unit must be in **STANDBY** mode.

1. Press **HIDDEN PAD**.
2. Press pads **1, 3, 5, 7, 9**.
3. Press **"0"** pad.



NOTE: Display will show the current offset setting.

4. Press the **"0"** pad to change the offset.

Fahrenheit

NOTE: Offset temperature range is +40°F to -40°F and advances in 2 and 3° increments.

Celsius

NOTE: Offset temperature range is +22°C to -22°C and advances in 1 and 2° increments.

5. Press **STOP/RESET** pad to save offset changes.

NOTE: Retest the oven after any offset changes are made.

Fahrenheit Example:

- Oven temperature is set for 450°F
- Average of temperature test is 475°F
- Offset setting must be reduced by 25°F
- If offset is shown as 10°, press the "0" pad until -15 is shown in the display (10 - 25 = -15)

Celsius Example:

- Oven temperature is set for 230°C
- Average of temperature test is 240°C
- Offset setting must be reduced by 10°C
- If offset is shown as 5°, press the "0" pad until -5 is shown in the display (5 - 10 = -5)

DISPLAY DIAGNOSTICS

Error Codes: During operation, the display may show the following service codes:

Note: Before scheduling service for any error codes, instruct customer to unplug oven for 1 minute, reconnect power, and re-test. If unit operates properly, no service call is required.

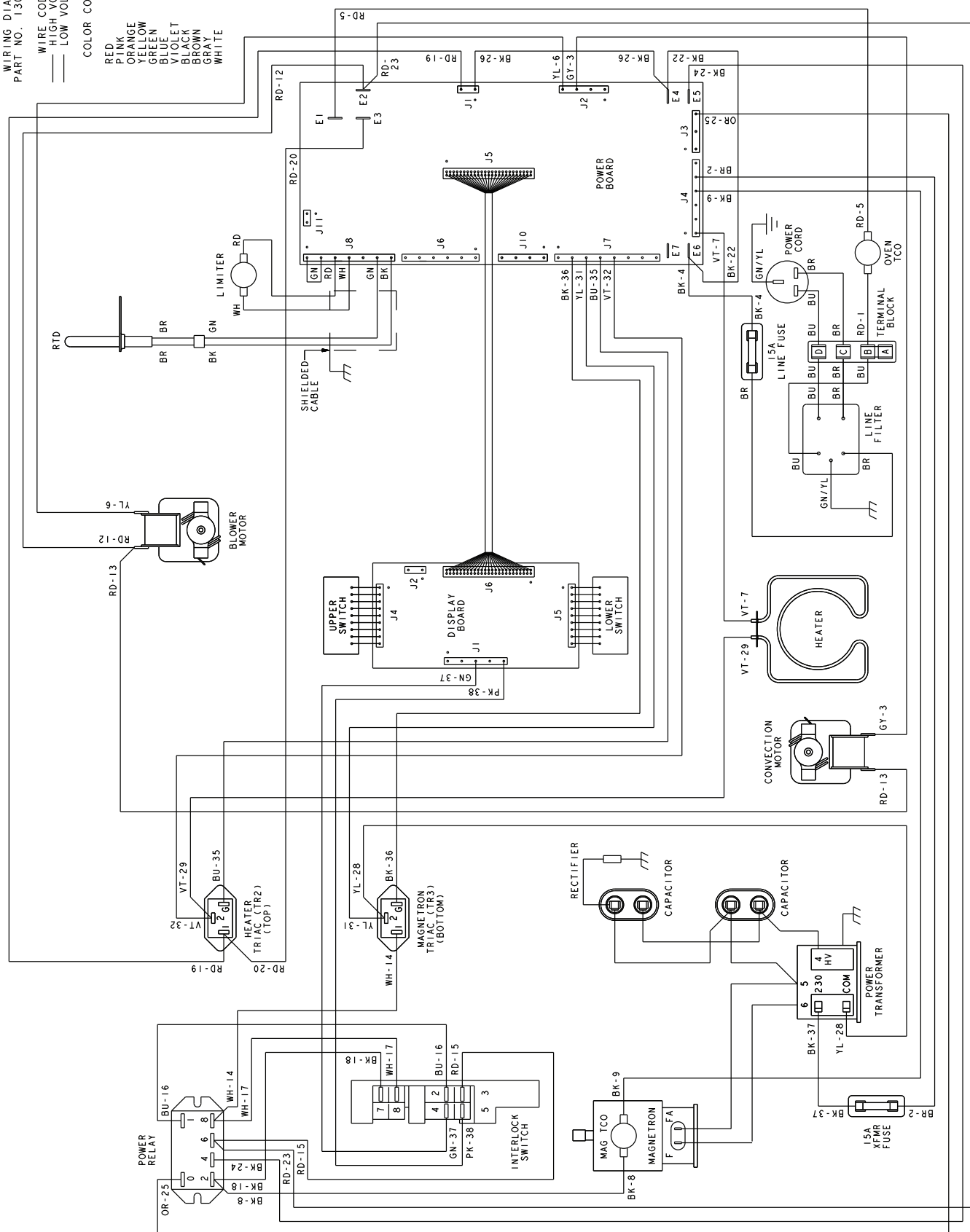
<u>DISPLAY</u>	<u>DESCRIPTION</u>	<u>CORRECTIVE ACTION</u>
Error 1U	Chassis Memory Not Found	-Check EZ Card Harness -Replace EZ Card Board
Error 1F	Chassis Memory Not Programmed	-Unplug Oven and Re-Plug In -Replace H.V. Board
Error 2	Failed H.V. Board	-Replace H.V. Board -Replace Touch Panel
Error 3	Failed H.V. Board	-Replace H.V. Board -Replace Touch Panel
Error 4	Failed H.V. Board	-Replace H.V. Board -Incorrect H.V. Board Installed in Oven
Error 5	Shorted Touch Panel	Note: If touch panel is pressed for more than 30 seconds, this error code will appear. -Disconnect Oven From Power Supply -Disconnect Side Touch Panel Connector From Display Board. -Reconnect Oven to Power Supply -If "Err5" Reappears After 30 Seconds, Replace Top Touch Panel. -If "Err5" Does Not Reappear After 30 Seconds, Replace Side Touch Panel.
Error 6	Options Scrambled	Replace H.V. Board
Error 7-O	Open RTD	Check RTD and Wiring to H.V. Board
Error 7-S	Shorted RTD	Check RTD and Wiring to H.V. Board
Door Open	Door Interlock Primary Switch	-Verify Latch Mechanism Moves Freely On Door. -Verify J1 Connector On Display Board Is Properly Seated. -Test Interlock Switch Assembly and Perform Door Adjustment If Necessary. -Replace Interlock Switch Assembly.
Error Oven to Hot	Control TCO Open	-Check Fan Blade. -Check Airflow. -Fan Motor not Operating.

WIRING DIAGRAM

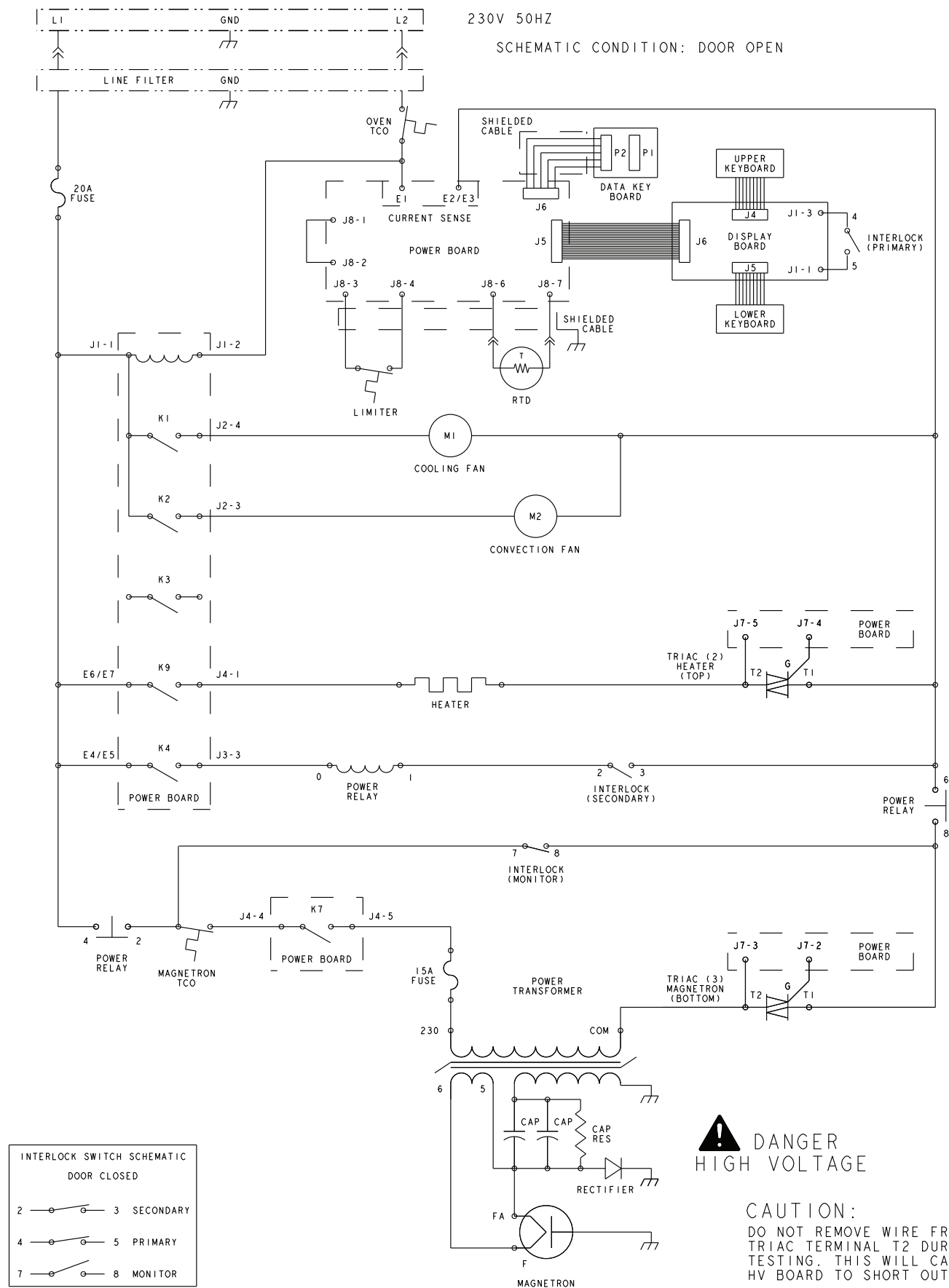
WIRING DIAGRAM
PART NO. 13070304

WIRE CODE
— HIGH VOLTAGE
— LOW VOLTAGE

COLOR CODE
RD RED
PK PINK
OR ORANGE
YL YELLOW
GN GREEN
VU VIOLET
BK BLACK
BR BROWN
GY GRAY
WH WHITE



SCHEMATIC



Owner's Manual



Commercial Combination Oven (Microwave and Convection)

Keep these instructions for future reference. If the equipment changes ownership, be sure this manual accompanies equipment.

Contents

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Model Identification

When contacting Amana, provide product information.
Product information is located on oven serial plate.
Record the following information:

Model Number: _____

Serial or S/N Number: _____

Date of installation: _____

Dealer's name and address: _____

Any questions or to locate an authorized Amana servicer,
call Amana ComServ Service Support.

- Inside the U.S.A. or Canada, call toll-free at 866-426-2621.
- Outside the U.S.A. and Canada, call 319-368-8120.
- Email: Commercialservice@amana.com.

Warranty service must be performed by an authorized
Amana servicer. Amana also recommends contacting an
authorized Amana servicer, or Amana ComServ Service
Support if service is required after warranty expires.

Installation

Unpacking Oven

- Inspect oven for damage such as dents in door or inside oven cavity.
- Report any dents or breakage to source of purchase immediately.
Do not attempt to use oven if damaged.
- Remove all materials from oven interior.
- If oven has been stored in extremely cold area, wait a few hours before connecting power.

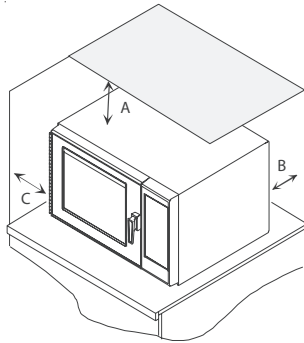
Radio Interference

Microwave operation may cause interference to radio, television, or a similar oven. Reduce or eliminate interference by doing the following:

- Clean door and sealing surfaces of oven according to instructions in *Care and Cleaning* section.
- Place radio, television, etc. as far as possible from oven.
- Use a properly installed antenna on radio, television, etc. to obtain stronger signal reception.

Oven Placement

- Do not install oven next to or above source of heat, such as pizza oven or deep fat fryer. This could cause microwave oven to operate improperly and could shorten life of electrical parts.
- Do not block or obstruct oven filter. Allow access for cleaning.
- Install oven on level countertop surface.
- If provided, place warning label in a conspicuous place close to microwave oven.
- Outlet should be located so that plug is accessible when oven is in place.



A—For North American (UL/CSA) models, allow at least 2" (5.1 cm) of clearance around top of oven. For International (50 Hz) models, allow at least 7" (17.8 cm) of clearance around top of oven. Proper air flow around oven cools electrical components. With restricted air flow, oven may not operate properly and life of electrical parts is reduced.

B—Allow at least 2 9/16" (6,5 cm) between air discharge on back of oven and back wall.

C—Allow at least 1 1/4" (3 cm) of clearance around sides of oven.

Oven Clearances

The switching operation of this microwave oven can cause voltage fluctuations on the supply line. The operation of this oven under unfavorable voltage supply conditions can have adverse effects. This device is intended for the connection to a power supply system with a maximum permissible system impedance Z_{max} of 1.1 Ohm at the interface point of the user's supply. The user has to ensure that this device is connected only to a power supply system which fulfills the requirement above. If necessary, the user can ask the public power supply company for the system impedance at the interface point.

WARNING

To avoid risk of electrical shock or death, this oven must be grounded and plug must not be altered.



Earthing Instructions

Oven **MUST** be grounded.

Grounding reduces risk of electric shock by providing an escape wire for the electric current if an electrical short occurs. This oven is equipped with a cord having a grounding wire with a grounding plug. The plug must be plugged into an outlet that is properly installed and grounded.

Consult a qualified electrician or servicer if grounding instructions are not completely understood, or if doubt exists as to whether the oven is properly grounded.

Do not use an extension cord. If the product power cord is too short, have a qualified electrician install a three-slot receptacle. This oven should be plugged into a separate circuit with the electrical rating as provided in product specifications (available on Amana's wavelink website). When the combination oven is on a circuit with other equipment, an increase in cooking times may be required and fuses can be blown.

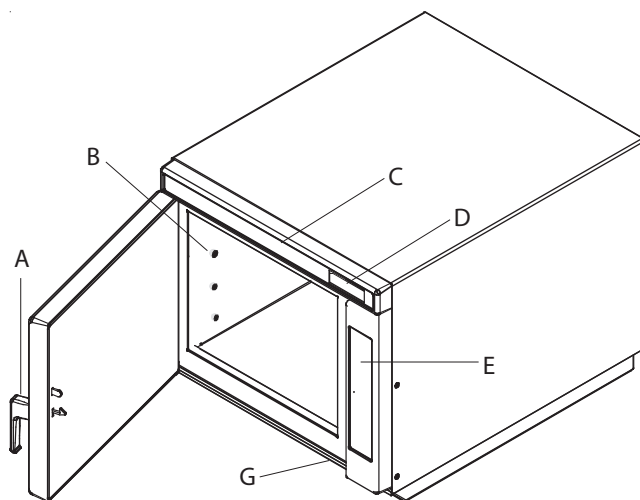
External Equipotential

Earthing Terminal (*export only*)

Equipment has secondary earthing terminal. Terminal provides external earthing connection used in addition to earthing prong on plug. Located on outside of oven back, terminal is marked with symbol shown below.



Display and Features



A—Oven Door Handle (Lift to open.)

B—Rack Guides

C—Top Control Panel

D—Display

E—Side Control Panel

G—Air Intake Filter (some models)

Oven Features

Standby shows in display after oven door has been opened and closed, or after turning oven OFF with the Preheat On/Off pad.

Standby

Oven Preheating
230°C

Oven Preheating and set temperature shows in display after pressing Preheat On/Off pad. (example of 230°C shown)

Display and Features (cont'd)

Ready and set temperature displays after pressing Preheat On/Off pad. Ready indicates the oven is up to temperature. (example of 230°C shown)

Ready
230°C

Indicates oven is in a preprogrammed cooking program

Item-05 Stage:1
01:23 230°C MW:50%

Time left in cooking program Cooking temperature Percentage of microwave power

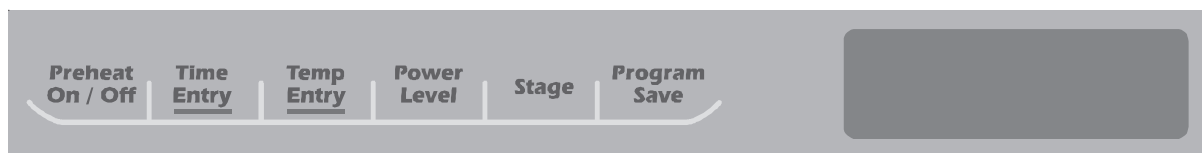
Cooking information shows in display after pressing a single (or double) digit pad while in Ready Mode.

Indicates oven is in a manual cooking program

Manual Stage: 1
00:15 246°C MW:100%

Time left in cooking condition Cooking temperature Indicates percentage of microwave power

Display and Features (cont'd)



Start

Start pad
The Start pad is used to begin a manual time entry cooking cycle.

Stop Reset

Stop/Reset pad
The Stop/Reset pad stops a cooking sequence in progress, clears out any remaining time, and also ends a programming or user option cycle. When the Stop/Reset pad is used to end a programming or option change, the changes are discarded.

Temperature warnings

The combination oven has two distinct temperature warnings. Warnings sound with a three beep signal when a programmed pad is pressed. Warnings are:

- A warning when the preheat temperature does not match the preprogrammed temperature of a cooking condition.
- A warning when the actual oven cavity temperature is not to preheat temperature, such as when the oven is first started.

To override the warning and begin a cooking cycle, press the Start pad. To turn off warnings, see *User Options* section.

Cooking Display

DISPLAYS	DESCRIPTION
OVEN PREHEATING 230°C	Oven Preheating 230°C displays when oven turned on and is warming up to the selected preheat temperature. Oven Preheating also flashes when a cooking condition can be started programmed. (example of 230°C shown)
READY 230°C	Ready 230°C displays when oven has reached preheat temperature and is ready to cook. Read also flashes when a cooking condition can be started or programmed. (example of 230°C shown)
00:00	Displays cooking time. If stage cooking is programmed, total cooking time is displayed.
MW 50%	MW 50% displays the current microwave power level. 100% is the highest setting, and 0% is low (no microwave energy used). (example of 50% shown)
ITEM-05	ITEM-05 displays the single or double digit entry of a programmed cooking condition when using programmed pad. (example of Item 05 shown)
STAGE 1	Stage 1 displays to show the stage number (1 through 4) the oven is at in the cooking condition
STANDBY	STANDBY displays when oven is turned off, and also after the oven is plugged in, the door is opened, and then shut.

Programming Display

DISPLAYS	DESCRIPTION
Enter Program to Add/Review:	Displays when oven is in programming mode for single pad or double pad memory.
STAGE 1	Displays stage number during cooking or when programming a specific cooking stage. Stage number (1 through 4) indicates the stage that is being used.

Programming

Programming Pads

Oven is shipped from the factory for single pad programming. To change the oven default to double pad programming, see *User Option* section. To program the amount of time, power level, or temperature setting for a pad:

1. Oven must be ON.
 - Press Preheat On/Off pad.
 - Oven Preheating 230°C shows in display with Oven Preheating flashing. (example of 230°C shown)
2. Oven reaches preheat temperature.
 - Signal sounds and Ready 230°C shows in display with Ready flashing. (example of 230°C shown)
2. Press Program Save pad.
 - Programming mode begins.
 - Enter Program to Add/Review: shows in display.
3. Press pad to be programmed or reprogrammed.
 - Display will change to review all settings for the pad.
 - The pad number that is being programmed displays beside the word ITEM .
4. Press Time Entry pad to program amount of cooking time.
 - Enter desired cooking time by using numeric key pads.
 - The total microwave cooking time (all stages combined) is 20 minutes.
5. Press Temp Entry pad to program the cooking temperature.
 - Enter desired convection temperature by using numeric pads.
6. Press Power Level pad to program level of microwave power.
 - Press numeric key pad for desired level. Press numeric key pad again to set power level to 100%.
 - For a lower microwave power, press pads 1 (for 10%) through 9 (for 90%). 0 turns off the microwave power and cooking is by convection only.
7. Press Program Save pad to save the program changes.
8. To discard changes, press Stop/Reset pad.

Preheat
On / Off

Program
Save

Time
Entry

Temp
Entry

Power
Level

Program
Save

Programming Preheat Setting

The convection temperature setting can be set between 150°F to 475°F (65°C to 250°C). It is recommended to set the preheat setting to the most commonly used temperature for that oven. The factory default preheat setting is 450°F (230°C).

To program the preheat setting :

1. Press Program Save pad.
2. Press Temp Entry pad.
3. Enter desired temperature by using the numeric key pads.
 - Temperature must be entered in 25°F (10°C) increments. If not, the temperature will automatically change to the nearest 25°F (10°C).
4. Preheat temperature is changed.

Stage

What is stage cooking?

Stage cooking enables several different cooking cycles, or stages, to be used consecutively without repeated input from the user. Stage cooking can be set to defrost food initially, then cook it, and then keep the food warm until serving time.

Programming Multiple Stages

Stage cooking allows consecutive cooking cycles without interruption. Up to four different cooking cycles can be programmed into a memory pad. To use stage cooking:

1. Follow steps 1 through 6 above.
7. Press Stage pad.
 - This will begin programming for the next cooking stage.
 - Display indicates stage to be programmed.
 - Enter cook time, temp and power level as in steps 4. 5 and 6.
 - To enter another cooking stage for that pad, press Stage pad again.
 - Up to four different stages can be programmed.
8. Press Program Save pad to save the program and changes.
9. To discard changes, press Stop/Reset pad before pressing Program Save pad.

Stage

Program
Save

Convection Cooking



CAUTION

To avoid risk of burns, handle utensils, racks, and door with care. Allow oven, utensils, and racks to cool before cleaning. Oven, utensils, and racks, become hot during operation.

To operate the oven for convection cooking only, you can use preprogrammed pads or manual time entry. The following instructions are for convection cooking only. For combination cooking, see that section.

Convection Cooking

Convection cooking utilizes both a convection element and fan to evenly distribute heated air throughout the oven cavity. By circulating air, no hot or cold spots occur, creating a consistent temperature envelope around the food. These consistent temperatures cook food evenly and reduces cooking time. Oven will always operate in convection mode.

Convection Cooking with Programmed Pads

1. Press Preheat On/Off pad to start the oven.
 - Oven begins a preheat cycle.
 - Oven Preheating 230°C shows in display. (example of 230°C shown)
 - To change preheat temperature, see *Programming*.
2. Oven reaches preheat temperature.
 - Signal sounds and Ready 230°C displays.
3. Press selected pad.
 - If using single pad programming, press pad and oven begins automatically.
 - For double pad programming, press pads in proper sequence and oven begins automatically.
4. Cooking cycle begins
 - Preprogrammed cooking program, total cooking time, cooking temperature, percentage of microwave power, and stage are all displayed.
5. Oven finishes cooking sequence
 - An end of cycle beep signals the end of the cooking cycle.
 - Done shows in display.
 - Oven interior and cooking dish will be hot.
6. Press Preheat On/Off pad to shut off oven.

**Preheat
On / Off**

Convection Cooking Using Manual Cooking Operation

1. Press Preheat On/Off pad to start the oven.
 - Oven begins a preheat cycle.
 - Oven Preheating 230°C shows in display. (example of 230°C shown)
 - To change preheat temperature, see *Programming*.
2. Oven reaches preheat temperature.
 - Signal sounds and Ready 230°C displays.
3. Press Time Entry pad.
 - Enter desired cooking time by using the numeric keypad.
4. Press Temp Entry pad if cooking temperature differs from preheat temperature.
 - Enter the new temperature.
5. Press Power Level pad.
 - Press numeric key pad for desired level. Press numeric key pad again to set power level to 100%.
 - For a lower microwave power, press pads 1 (for 10%) through 9 (for 90%). 0 turns off the microwave power and cooking is by convection only.
6. If stage cooking is desired, press Stage pad and repeat steps 3, 4, and 5.
 - Up to 4 different stages can be programmed.
7. Press the Start pad to begin the cooking cycle.

**Preheat
On / Off**

**Time
Entry**

**Temp
Entry**

**Power
Level**

Start

Combination Cooking (microwave and convection)



CAUTION

To avoid risk of burns, handle utensils, racks, and door with care. Allow oven, utensils, and racks to cool before cleaning. Oven, utensils, and racks, become hot during operation.

To operate the oven for combination cooking, you can use preprogrammed pads or manual time entry. The following instructions are for combination cooking only. For convection only cooking, see that section.

Combination Cooking With Preprogrammed Pads

1. Press Preheat On/Off pad to start the oven.
 - Oven begins a preheat cycle.
 - Oven Preheating 230°C shows in display.
(example of 230°C shown)
 - To change preheat temperature, see *Programming*.
2. Oven reaches preheat temperature.
 - Signal sounds and Ready 230°C displays.
3. Press selected pad.
 - If using single pad programming, press pad and oven begins automatically.
 - For double pad programming, press pads in proper sequence and oven begins automatically.
4. Cooking cycle begins
 - Preprogrammed cooking program, total cooking time, cooking temperature, percentage of microwave power, and stage are all displayed.
5. Oven finishes cooking sequence
 - An end of cycle beep signals the end of the cooking cycle.
 - Done shows in display.
 - Oven interior and cooking dish will be hot.
6. Press Preheat On/Off pad to shut off oven.

**Preheat
On / Off**

Combination Cooking

The combination mode uses both the speed of microwave energy and browning of convection cooking to yield fast, high quality food.

- Microwave cooking uses high frequency energy waves to heat the food. When cooking, microwave energy causes food molecules to move rapidly. This rapid movement between the food molecules creates heat, which cooks the food. POWER displays when oven is generating microwave energy for the current cycle.
- Convection cooking uses the selected oven temperature to bake and brown foods. The circulating air surrounds food in an envelope of evenly heated air.
- Oven will maintain a minimum convection temperature of 65°C (150°F) to ensure drier air and more even cooking.

Combination Cooking Using Manual Cooking Operation

1. Press Preheat On/Off pad to start the oven.
 - Oven begins a preheat cycle.
 - Oven Preheating 230°C shows in display.
(example of 230°C shown)
 - To change preheat temperature, see *Programming*.
2. Oven reaches preheat temperature.
 - Signal sounds and Ready 230°C displays.
3. Press Time Entry pad.
 - Enter desired cooking time by using the numeric keypad.
4. Press Temp Entry pad if cooking temperature differs from preheat temperature.
 - Enter the new temperature.
5. Press Power Level pad.
 - Press numeric key pad for desired level. Press numeric key pad again to set power level to 100%.
 - For a lower microwave power, press pads 1 (for 10%) through 9 (for 90%). 0 turns off the microwave power and cooking is by convection only.
6. If stage cooking is desired, press Stage pad and repeat steps 3, 4, and 5.
 - Up to 4 different stages can be programmed.
7. Press the Start pad to begin the cooking cycle.

**Preheat
On / Off**

**Time
Entry**

**Temp
Entry**

**Power
Level**

Start

User Options



Didn't like an option?

Factory settings are marked in bold. To change the oven back to the factory setting, simply select the option that is marked in bold.



My changes weren't saved.

In order for any changes to be saved, the Program Save pad must be pressed after selecting an option. Pressing the Stop/Reset pad will not save changes.

Changing user options

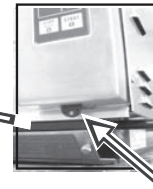
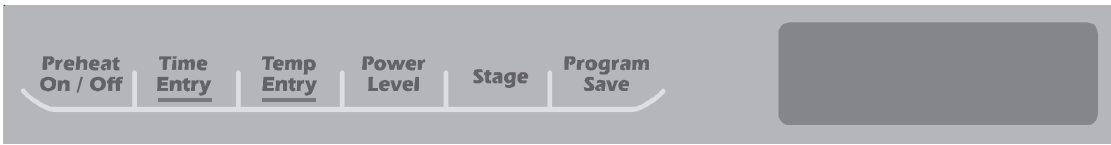
Options such as single or double pad programming, beep volume, and maximum cooking time can be changed to suit individual preferences.

To change options oven STANDBY must display:

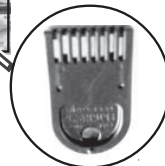
1. Press hidden pad.
 - Pad is unmarked and located to the direct left of Preheat On/Off pad.
 - Nothing will be displayed when hidden pad is pressed.
2. Press Program Save pad.
 - The first user option will display. Oven is now in options mode.
3. Press number pad that controls option to be changed.
 - See table below for options.
 - Current option will display.
4. Press numeric pad again to change the option.
 - Each time pad is pressed, option will change.
 - Match code displayed with code for desired option.
 - To change additional options, repeat steps 3 and 4.
 - Changes take affect after pad is pressed.
5. Press Stop/Reset pad to return to STANDBY, or open and close oven door.

Numbered Pads	Display	Options (Factory Settings in Bold)
1 Double Digit Entry	Disabled Enabled	Allows 10 (0-9) preprogrammed pads. Allows 100 (00-99) preprogrammed pads.
2 Manual Programming	Disabled Enabled	Manual time entry/cooking not allowed Manual time entry/cooking allowed
3 Reset on Door Open	Disabled Enabled	Opening oven door does not reset oven back to ready mode Opening oven door resets the oven back to ready mode
4 Keybeep	OFF ON	Keys do not beep when pressed (keybeep off) Keys beep when pressed (keybeep on)
5 Speaker Volume	OFF LOW MEDIUM HIGH	Keybeep volume OFF Keybeep volume LOW Keybeep volume MEDIUM Keybeep volume HIGH
6 End of Cook Signal	Solid Beep 3 Second Beep 4 Beeps Once 4 Beeps Repeating	Food done signal is a continuous beep until reset by user Food done signal is a three second beep Food done signal is four beeps, continuously Food done signal is four beeps, four times
7 Keypad Active	15 SECONDS 30 SECONDS 60 SECONDS 120 SECONDS ALWAYS	Keypad time entry window is 15 seconds Keypad time entry window is 30 seconds Keypad time entry window is one minute Keypad time entry window is two minutes Keypad time entry window is always active
8 Preheat Warning	Disabled Program Warning Only Preheat Warning Only Both	Both temperature warnings off Warning only when preheat temperature does not match preprogrammed temperature Warning only when actual oven cavity temperature is not to preheat temperature Both temperature warnings on
TEMP PAD Temperature Units	FAHRENHEIT CELSIUS	Temperatures are displayed in °F for 60 Hz models Temperatures are displayed in °C for 50 Hz models
STAGE PAD Clean Filter Message (Frequency)	Disabled Weekly Monthly Quarterly	Oven will not display Clean Filter Oven will display Clean Filter every seven (7) days Oven will display Clean Filter every thirty (30) days Oven will display Clean Filter every ninety (90) days

EZCard Operating Instructions (some models)



EZCard slot



EZCard

To program the oven using the EZCard:
Oven must be in Standby mode (Preheat must be OFF)

1. Remove protective cover from bottom of vertical keypad.
2. Insert the EZCard into the slot located below the vertical keypad.
 - The EZCard can be inserted forwards or backwards.
3. Press and hold the Program Save pad for 3 seconds.
 - AUTO , then PROG displays briefly, repeating this sequence every second as the EZCard automatically programs the oven.
 - When the oven programming is complete, DONE shows in the display for 3 seconds and the oven beeps.
 - The oven resets to the standby mode.
4. Remove the EZCard.
 - The oven programming is now complete.
5. Place protective cover back over slot in bottom of control panel.

Caution:

DO NOT REMOVE EZCard while programming. Removing card during programming can cause the oven's keypad to freeze up.

NOTE: If 00:00 displays, 3 beeps sound and the display returns to the Standby mode, the EZCard was not detected.

- Reinsert the EZCard into the slot and try each step again.
- If after several attempts, the EZCard is still not detected, contact Amana ComServ Service Support.
 - Inside the U.S.A. or Canada, call toll-free at 866-426-2621.
 - Outside the U.S.A. and Canada, call 319-368-8120.
 - Email: commercialservice@amana.com.



Use this option only to transfer data from the oven TO the EZCard. This will overwrite all programming on the EZCard!

To transfer programming from the oven to the EZCard:

Oven must be in Standby mode (Preheat must be OFF)

1. Remove protective cover from bottom of vertical keypad.
2. Insert the EZCard into the slot located below the vertical keypad.
 - The EZCard can be inserted forwards or backwards.
3. Press the Program Save pad.
4. Press the START pad.
5. Press the 1 pad, the 3 pad, and then the 5 pad.
 - The programming transfer will begin automatically and the display will show moving dashes.
 - When the programming transfer is complete, DONE shows in the display for 3 seconds and the oven beeps.
 - The oven resets to the standby mode.
6. Remove the EZCard.
 - The programming transfer is now complete.
7. Place protective cover back over slot in bottom of control panel.

To order additional EZCards, call the Amana Commercial Inside Sales Team toll-free at 866-426-2621 (U.S.A. or Canada), or 319-368-8120 (outside the U.S.A. and Canada).

User Maintenance

Moving Oven Rack Guides (some models)

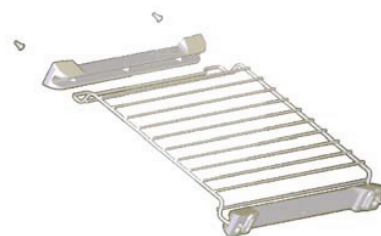
The oven rack guides can be moved to one of three positions within the oven, allowing for versatility in cooking and placement of food. The middle rack position is the most common. Guides can also be removed for easier cleaning.

To remove rack guides:

1. Oven cavity must be cool to touch.
2. Remove oven rack by lifting up and sliding to the front of the oven.
3. Apply gentle pressure by pulling upwards on the front of rack guide.
4. Lift the rear of the rack guide to remove. Guide may be snug.

To replace rack guides:

1. Oven cavity must be cool to touch.
 - UP on guide rack should be in correct direction for placement.
2. Place rear of rack guide over desired anchor in back of oven and push down.
3. Place front of rack guide over desired anchor in front of oven.
 - Apply firm pressure to front and rear of rack guide to fit onto anchor.
 - Fit may be tight.
 - Rack guide should not move after being set in place.
4. Replace oven rack as desired.
 - Slide oven rack towards rear of oven, holding upwards to avoid detents.
 - Oven rack can be placed upwards or downwards. Upwards is recommended.
 - Oven rack must be seated in detents.



Service codes

During operation, the oven may display a service code. If this should occur:

1. Unplug oven and leave unplugged for approximately one minute. Plug oven in and see if code reappears.
 - If code does not reappear, continue normal use with the oven.
2. If service code reappears, write down the service code displayed and contact the nearest authorized Amana Servicer.
 - Do not use oven until contacting the Amana Servicer.

Error2

(example)

Care and Cleaning

Clean oven frequently to maximize oven life, performance, and efficiency. A dirty oven cooks inefficiently because moisture, spills, and grease absorb convection and microwave energy.



WARNING

To avoid electrical shock which can cause severe personal injury or death, unplug power cord or open circuit breaker to oven before cleaning oven.



CAUTION

To prevent burns, handle utensils, racks, and door with care. Allow oven, utensils, racks to cool before cleaning. Oven, utensils, and racks, become hot during operation.

Cleaning the Oven

Daily Cleaning Recommendations: Follow the recommendations below for proper maintenance of this oven.

Please Note: The use of caustic cleaning products or those containing ammonia, phosphates or chlorine can damage critical oven parts and may void the warranty on those parts.

Recommended Cleaning Supplies: Plastic scraper or plastic putty knife, scrub pad or nylon sponge safe for a non-stick finish such as a light duty scrub sponge.

1. Shut oven off by pressing the Preheat On/Off pad. Open oven door and allow oven to cool (approx. 60-90 minutes).
2. Remove rack, rack guides and accessories. Wash with warm, soapy water (except for pizza stone) and allow to air dry while cleaning oven interior. Clean pizza stone by using a plastic scraper and a damp cloth only.
3. Remove baked on particles from oven floor, rear, sides, and door by using a plastic scraper. When finished scraping, use a damp cloth to remove particles from oven.
4. With rubber gloves on, spray oven door, sides and floor with EcoLab Grease Cutter NC. Allow to soak for 5-10 min.

Remove racks and rack guides for best results. Clean oven daily using EcoLab Grease Cutter NC or another non-caustic cleaner. DO NOT use caustic cleaning products or those containing ammonia, phosphates or chlorine.

NOTE: A plastic putty knife or equivalent may be used to remove baked on debris.

- Remove food from oven at end of cycle.
- Wear protective rubber gloves when cleaning oven.
- Use only a plastic putty knife, nylon scouring pad or equivalent, to aid in removing soil or build-up from the oven interior.
- Do not use knife, metal utensil, or steel wool pad to remove baked on material. This will damage the teflon coating.
- Refer to warranty for limitations regarding teflon interior and cleaning requirements.
- Use only accessories that are both high temperature oven-safe and microwave-safe in the oven.
- DO NOT use a water-pressure type cleaning system.
- DO NOT cook foods with plastic wrap on them.
- DO NOT use metal pans or foil in the oven.

Recommended Maintenance

Clean Heater Box

(Not covered under warranty)

- Contact an authorized servicer to remove and clean heater box.
- Cleaning the heater box is recommended every 12 months or when heavy grease buildup is apparent on back of oven cavity.

Before Calling for Service



WARNING

To avoid electrical shock which can cause severe personal injury or death, do not remove outer case at any time. Only an authorized servicer should remove outer case.

Problem	Possible Cause
Oven does not operate.	Confirm oven is plugged into dedicated circuit. Confirm oven is on grounded circuit. (Contact electrician to confirm) Check fuse or circuit breaker.
Oven operates intermittently or HOT shows in display.	Check air filter and discharge areas for obstructions.
If oven does not accept entries when pad is pressed.	Make sure oven is on and preheated. Open and close oven door. Press pad again.
If oven malfunctions or shows: Error2 (example)	Oven control is equipped with a self-diagnostic system. Self-diagnostic system alerts you if there is an error or problem. When electronic control signals a problem, follow steps listed below. 1. Record number shown. (example of Error2 shown) 2. Unplug oven, wait for 1 minute, and plug in oven. • Disconnecting electrical supply may eliminate service code. If failure continues, contact an authorized servicer.
Oven fan turns on while oven is not preheating or cooking.	Normal operation.

For full product documentation visit:
www.amanacommercial.com

